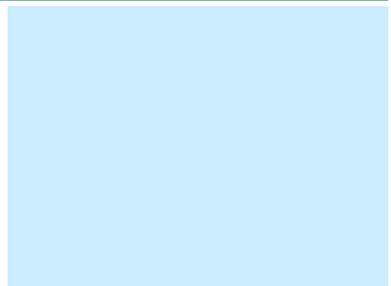
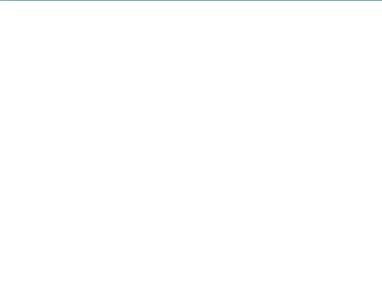
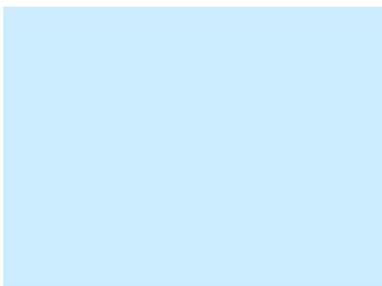


House of Delegates: Environment & Transportation Committee  
**The State of Maryland Agriculture**  
 Secretary Joe Bartenfelder  
 January 18, 2017





# At Md. Dept. of Agriculture...

## Our Vision is:

**...to achieve excellence in programs and in services that preserve and protect agricultural resources and the environment, promote profitable agriculture and consumer confidence, and enhance the quality of life for all Marylanders.**

## Our Mission is:

**...to provide leadership and support to agriculture and the citizens of Maryland by conducting regulatory, service, and educational activities that assure consumer confidence, protect the environment, and promote agriculture.**



# Agriculture in Maryland



- **12,256 farms on 2 million acres**
- **Average farm size: 166 acres**
- **Top Commodities:**
  - *Poultry*
  - *Grain (corn and soybeans)*
  - *Greenhouse and nursery*
  - *Dairy*
- **Maryland also has strong and expanding markets in local, value-added, fresh produce, and organic products that capitalize on regional demographics.**



# 2017 Legislative Priorities

## **Wine and Grape Promotion Fund**

Establish more efficient review and approval process for grant applications submitted to Maryland Wine and Grape Promotion Fund.

## **MALPF Easement Termination Process**

Create more efficient, two-step process for determining if an easement is eligible for termination.

## **Seafood Marketing**

Transfer the seafood marketing division of DNR to MDA. Also transfers Seafood Marketing Fund. Program would be housed under MDA's current marketing division.



# Departments & Programs

## I. Marketing, Animal Industries & Consumer Services

- Agricultural Marketing
- Animal Health
- Food Quality Assurance
- Maryland Horse Industry Board
- Maryland Agricultural Fair Board
- State Board of Veterinary Medical Examiners
- Weights & Measures

## II. Plant Industries & Pest Management

- Plant Protection & Weed Management
- Turf & Seed
- Pesticide Regulation
- State Chemist
- Mosquito Control
- Forest Pest Management

## III. Resource Conservation

- Nutrient Management Program
- Resource Conservation Operations
- Maryland Agricultural Water Quality Cost-Share Program (MACS)



# Office of Marketing, Animal Health & Consumer Services





# Maryland's Best



**FRESH  
LOCAL**

- State's Agricultural Marketing Program
- Homegrown By Heroes
  - Launched Nov. 2, 2016
- Md.'s Best Restaurants
- Buyer Grower Meeting, Jan. 25
- Farmers Market Program





# High Path Avian Influenza (HPAI)



- Three-fold increase in HPAI diagnosis this winter
  - Europe, Asia and Africa
  - Strains: H5/N8, H5/N6
- MDA renewed emergency orders for HPAI
  - Possible detection in York Co. (PA)
- Continuing to prepare
  - Outreach to farmers and stakeholders
  - Tabletop exercises





# Food Safety Modernization Act (FSMA)

- Passed by Congress (2010)
- Produce Safety Rule first to regulate production practices:
  - Human pathogens in irrigation water
  - Use of biological soil amendments
  - Worker health and hygiene
  - Proximity of livestock, poultry, domestic, and wild animals
- FDA awarded \$3.625 MM/5 yr for Maryland Produce Safety Rule
  - Outreach, education, and technical assistance
  - Inspection and Enforcement





# Spay & Neuter Program



- Est. 2014—funded by fees on registered pet food
- Purpose: Reduce intake and euthanasia rates at county shelters
- 59 projects funded since 2014
  - 26,000 surgeries
  - Expansion of low cost shelter
  - Equipment for two new clinics
- New RFP this month



# Office of Plant Industries and Pest Management



# Zika Virus & Mosquito Control



*Aedes albopictus*

- 161 Travel-Related Cases
  - 91 during mosquito season
- Worked alongside DHMH and Local Health Depts.
- Response included:
  - Trapping and inspection of effected area
  - Residual pesticide application
  - Truck-mounted spray
- Prevention & Outreach



# Industrial Hemp

## History

- HB443 became law in 2016
- MDA required to develop regulations

## Timeline

- Reviewed other states' regs
- Consulted with University
- Currently: reviewing draft regs
- Next: UMD, UMES and State Police review

## Regs – Key Points

- Licensed by MDA
- Properties owned by IHEs
- IHEs required to:
  - Include site info
  - Contact policy agencies
  - Hold DEA permit
  - Test for THC content
  - Submit research proposal
  - Develop security plan
  - Maintain records
- MDA may inspect sites during season



# Office of Resource Conservation





# Phosphorus Management Tool (PMT)

## Four Significant Enhancements

- 1. Enact an immediate ban of additional phosphorus on soils highest in phosphorus based on a soil test.**
- 2. Provide comprehensive information on soil phosphorus conditions statewide.**
- 3. Ensure adequate time for farmers to fully understand and plan for new requirements.**
- 4. Assure agricultural producers that critical elements are available for implementation.**



# Phosphorus Management Tool (PMT)

## MD State Total Soil Phosphorus Data 1/11/2017

<b>Total Regulated Acres</b>	<b>1,277,931</b>
<b>Total Acres Submitted</b>	<b>1,083,352</b>
<b>Percentage Reported</b>	<b>84.8%</b>
<b>Number of Fields Submitted</b>	<b>73,647</b>
<b>P FIV &lt; 150</b>	<b>79.3%</b>
<b>P FIV 150-499</b>	<b>19.1%</b>
<b>P FIV &gt; 500</b>	<b>1.6%</b>



# Phosphorus Management Tool (PMT)

## How It Works: Risk

7 YEAR TRANSITION SUMMARY							
	CROP YEAR						
	2016	2017	2018	2019	2020	2021	2022
<b>Tier C - Avg. FIV P 450 and above</b>	PSI/PMT	PSI/PMT	TM1	TM1	TM2	TM2	PMT
<b>Tier B - Avg. FIV P 300-450</b>	PSI/PMT	PSI/PMT	PSI	TM1	TM2	TM2	PMT
<b>Tier A - Avg. FIV P 150 - 300</b>	PSI/PMT	PSI/PMT	PSI	PSI	TM1	TM2	PMT
<b>PSI = Phosphorus Site Index</b>							
<b>TM1 = Transition Management Phase 1</b>							
<b>TM2 = Transition Management Phase 2</b>							
<b>PMT = Phosphorus Management Tool</b>							

\*\* Could add time if services are not adequate.



# Phosphorus Management Tool (PMT)

## PMT Statewide Tier Group Data

- **1,661 Operations** have been reported
  - Represents one or more fields being 150 or greater
  - Represents 11,769 fields
    - Only these fields transition to PMT
  - Represents 187,870 acres
- **PMT Tier Groups**
  - **Tier A = 150 – 300 Avg FIV (Transitions 2020)**

• 1,313 operations	8,220 fields	122,705 acres
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  - **Tier B = 300 – 450 Avg FIV (Transitions 2019)**

• 252 operations	2,815 fields	54,271 acres
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  - **Tier C = >450 Avg FIV (Transitions 2018)**

• 96 operations	734 fields	10,894 acres
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# Phosphorus Management Tool (PMT)



## Economic Analysis Sample

- 8 farms in study
  - 4 Poultry Operations
  - 4 Dairy Operations
- Participating farms range from 59 to 104 acres
- Each participant compensated with incentives to reimburse commercial fertilizer costs



# Phosphorus Management Tool (PMT)

## Case Study: Farm 2015-P-02

What was the change?

Price Per Acre: \$91.40      \$122.70

Change of **31.30** \$/acre

What were the extra costs?

In comparison with PSI, under PMT the farmer had to purchase:

- An additional ~56 lbs/acre N
- 60 lbs/acre Potash



# Manure Transport Program

## FY2016 Accomplishments

- 213,000 tons transported (all manure)
- \$1.4 million in payments
- Poultry litter tons: 57,700
- Other manure tons: 155,400
- Land applied poultry litter – 6,000 tons (17 contracts)



# Manure Transport Program



## Effect on WIP Goals

- Maryland continues to exceed WIP goals for Manure Transport
- Cost-Share program allows MDA to track manure transport



# Manure Transport Program

## Program History

Year	Tons Transported annually	Tons Poultry Litter Transported	Tons Non-Poultry Litter Transported
FY 99	1,925	1,925	0
FY 00	13,366	13,366	0
FY 01	20,477	20,477	0
FY 02	47,483	43,144	4,339
FY 03	28,463	27,707	756
FY 04	40,755	37,674	3,081
FY 05	38,333	24,080	14,253
FY 06	69,009	35,469	33,540
FY 07	99,298	47,844	51,454
FY 08	99,817	44,843	53,979
FY 09	119,892	62,505	57,387
FY 10	80,899	51,383	29,516
FY 11	61,150	37,807	23,343
FY 12	35,380	32,544	2,837
FY13	52,481	38,238	14,243
FY14	118,995	46,906	72,089
FY15	167,237	54,380	112,857
FY16	213,151	57,727	155,424
<b>Total</b>	<b>1,308,111</b>	<b>678,019</b>	<b>629,098</b>



# Animal Waste Technology Projects

PROJECTS	ANIMAL TYPE/LOCATION	STATE FUNDING	TECHNOLOGY	STATUS
Biomass Heating Solutions Inc. (BHSL) Annapolis, MD	Poultry Murphy Farms/Dorchester County	\$970,000	Fluidized bed (Thermo-chemical)	Commissioned Dec 2016, operational January 2017
Green Mountain Technologies, Inc. (GMT) Bainbridge Island, WA	Horse Days End Farm / Howard County	\$150,790	In vessel composter/turnkey	Operational October, 2015- present successful
Green Mountain Technologies, Inc. (GMT) Bainbridge Island, WA	Dairy Cattle Iager Farm /Frederick County	\$237,520	In vessel composter/turnkey	Operational December 2015 to present, 3 mos. add't monitoring planned
Planet Found Energy Development (PFED) Berlin, MD	Poultry Millenium Farms/Worcester County	\$676,144	Anaerobic digestion with nutrient separating system	Commissioning Dec 2016-January 2017; operational Feb 2017



# Animal Waste Technology Projects

Projects Approved October 2016

2016 projects	ANIMAL TYPE/LOCATION	STATE FUNDING	TECHNOLOGY
Veteran Compost	Livestock/Anne Arundel County	\$350,302	Aerated Static Pile Composting
ChesapeakeBay Renewables	Poultry Litter/Somerset County	\$1,400,000	Thermophilic AD w/Nutrient Recovery



**Thank You**